

wherein the light entering said entrance surface emerges from said exit surface by way of said first and second reflecting surfaces; and

wherein an optical path from said entrance surface to said exit surface is filled with a medium having a refractive power greater than 1.

26. An optical element according to Claim 25, wherein said entrance and exit surfaces having different optical powers according to an azimuth angle.--

#### REMARKS

Claims 1-26 are presented for consideration, with Claims 1, 9, 11, 15, 19 and 25 being independent.

Claims 15-26 have been added to provide an additional scope of protection. Support for the newly presented claims can be found beginning on page 6, line 6 of the specification.

Initially, Applicants note with appreciation that Claims 9-14 are allowed.

The specification was objected to under 35 U.S.C. §112, first paragraph, as allegedly failing to provide an adequate written description of the invention. This objection is based on the language in Claim 1 reciting that the optical means includes a curved face for totally reflecting the light "when an incident angle of the light is greater than a critical angle."

Claims 1-8 were rejected under 35 U.S.C. §112, first paragraph, for the same reason set forth in the objection to the specification.

In response to this objection and rejection, the Examiner's attention is respectfully directed to Figure 12A and the accompanying specification beginning on page 27, line 14. As disclosed, a toric aspherical front face 1 of an optical member 3 is curved, and light entering the front face at an incident angle at least equal to  $43^\circ$  is totally reflected. The light is directed to a toric aspherical concave face 2 at an incident angle not exceeding  $43^\circ$  and is then transmitted through the curved front face 1. From this disclosure, it is respectfully submitted that one skilled in the art would understand that the curved front face 1 totally reflects the light when the incident angle of the light is greater than a critical angle. In the example provided in Figure 12A, the critical angle is  $43^\circ$ .

Accordingly, it is submitted that the specification provides an adequate written description of the optical means including a curved face for totally reflecting the light when an incident angle of the light is greater than a critical angle. Therefore, reconsideration and withdrawal of the objection to the specification and the rejection of the claims under 35 U.S.C. §112, first paragraph, is deemed to be in order and such action is respectfully requested.

With respect to the newly submitted claims, Claims 15 and 19 relate to a display apparatus that includes display

means for forming image information and optical means for guiding light of the display means to an eye. In Claim 15, the optical means includes a concave mirror decentered with respect to an optical axis of the eye and having different optical powers according to an azimuth angle and another surface decentered with respect to the optical axis of the eye having different optical powers according to an azimuth angle. As claimed, when a paraxial curvature radius of a generatrix section of the concave mirror and a paraxial curvature radius of a meridian section of the concave mirror are respectively defined as  $r_y$  and  $r_x$ , the relationship of  $|r_x|$  is less than  $|r_y|$ .

In Claim 19, the optical means includes a first reflecting surface having different optical powers according to an azimuth angle, a second reflecting surface having different optical powers according to an azimuth angle, and a transmission surface having different optical powers according to an azimuth angle. The light of the display means reaches the eye by way of the first reflecting surface, the second reflecting surface and the transmission surface.

Claim 25 is directed to an optical element that includes an entrance surface, first and second reflecting surfaces having different optical powers according to an azimuth angle, and an exit surface from which light emerges. The light enters the entrance surface and emerges from the exit surface by way of the first and second reflecting surfaces, wherein an optical path from the entrance surface to the exit

surface is filled with a medium having a refractive power greater than 1.

The new claims are submitted to be patentable over the art of record.

In view of the foregoing, reconsideration and allowance of this application is deemed to be in order and such action is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 347-8100. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

  
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